REMARKS

This responds to the Office Action mailed on May 14, 2008.

Claims 1, 2, 3, 5, 9 and 14 are amended, no claims or added; as a result, claims 1-17 remain pending in this application. Support for the amendments may be found throughout the specification, and at least on pages 12-18 and on pages 22-35 of the specification. Applicant respectfully submits that no new matter has been introduced with the amendments.

§112 Rejection of the Claims

Claims 1-17 were rejected under 35 U.S.C. § 112, first paragraph, as lacking adequate description. In particular, the Office Action asserted that there was lack of support in the specification for claims 1-3 for the recitation that "proposal message including data defining a plurality of relationships between the plurality of nodes". Applicant has amended claims 1-3 such that the cluster membership message includes relationship data. Support for this may be found at least on page 17-18 of the specification.

Additionally, the Office Action stated that the specification lacked support for the recitation in claims 5, 9 and 14 of a "longest running node." Applicant as amended claims 5, 9 and 14 to recite an "oldest node".

In view of the amendments, Applicant respectfully submits that claims 1-17 are fully supported in the specification and respectfully requests reconsideration and the withdrawal of the rejection of claims 1-17 under 35 U.S.C. § 112, first paragraph.

§103 Rejection of the Claims

Claims 1-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Frank et al. (U.S. 6,532,494). The determination of obviousness under 35 U.S.C. § 103 is a legal conclusion based on factual evidence. See Princeton Biochemicals, Inc. v. Beckman Coulter, Inc., 411 F.3d 1332, 1336-37 (Fed.Cir. 2005). The legal conclusion that a claim is obvious within § 103(a) depends on at least four underlying factual issues set forth in Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966). The underlying factual

issues set forth in *Graham* are as follows: (1) the scope and content of the prior art; (2) differences between the prior art and the claims at issue; (3) the level of ordinary skill in the pertinent art; and (4) evaluation of any relevant secondary considerations.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir.1988). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested, by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); M.P.E.P. § 2143.03. "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970); M.P.E.P. § 2143.03. As part of establishing a *prima facie* case of obviousness, the Examiner's analysis must show that some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id*. To facilitate review, this analysis should be made explicit. *KSR Int'l v. Teleflex Inc.*, *et al.*, 127 S.Ct. 1727; 167 L.Ed 2d 705; 82 USPQ2d 1385 (2007) (citing *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006)). Applicant respectfully submits that claims 1-17 are not obvious in view of Frank because there are differences between the claims and Frank.

For example, claim 1 as amended recites a cluster membership service and a group membership service, where the cluster membership service determines membership in the cluster for a plurality of nodes, and further wherein the group membership service determines membership of a process for a distributed application in a group of nodes that are a subset of the nodes in the cluster. Claims 2 and 3 also recite a group membership service and a cluster membership service. Applicant respectfully submit that Frank does not disclose both a cluster membership service and a group membership service. Frank appears to disclose maintaining membership in a cluster. Thus Applicant's claims have an advantage over the system disclosed in Frank. Frank appears to limit process migration to situations where a node in the cluster has failed (see e.g., column 2, lines 5-13), where all applications are failed-over to another node. In Applicants recited claims, failure of a process in a group, not just node failure, can cause a process to failover to another node in a group defined for the cluster. Thus Applicant's recited

claims provide advantages in that more fine-tuning at the process level is available in Applicant's claimed invention.

Further, claim 1 as amended recites that the cluster membership service is "operable to determine membership in a cluster by exchanging messages, wherein a message originating from a node includes a node data area defining the node's view of the cluster relationships and wherein the message includes a checkmark data structure in which each node receiving the message sets the checkmark data structure according to whether the receiving node confirms the relationship defined in the node data area." Claims 2 and 3 recite similar subject matter. Frank does not disclose exchanging messages to define each node's view of the cluster, and further Frank does not disclose using a checkmark data structure to determine whether a receiving node confirms the view of the relationship in messages received from other nodes.

In view of the above, claims 1-3 recite multiple elements not found in Frank. As a result, there are significant differences between Frank and claims 1-3. Therefore claims 1-3 are not obvious in view of Frank. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 1-3.

Claims 4-7 depend either directly or indirectly from claim 1. Claims 8-12 depend either directly or indirectly from claim 2. Claims 13-17 depend either directly or indirectly from claim 3. Each of these dependent claims inherits the elements of their respective base claims, in addition to providing patentable distinctions. Therefore each of these dependent claims is allowable for at least the reasons discussed above regarding their respective base claims.. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 4-17.

Title: MAINTAINING MEMBERSHIP IN HIGH AVAILABILITY COMPUTING SYSTEMS

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CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' representative at (612) 373-6954 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date	November 14, 2008	ву 🖒 2 - 🔾	
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CERTIFICATE UNDER 37 CFR § 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this _14th_ day of November 2008.

Rodney L. Lacy	52.	2
Name	Signature	